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Submitted by:

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Delphi Technologies, Inc.,

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Atty. Docket No.	Serial No.
DP-309380	10/623,941

Applicant
MICHAEL RALPH FOSTER

Filing Date	Group
July 21, 2003	3748

U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	6,637,413	10/28/2003	Maloney, et al.			
	6,600,989	07/29/2003	Sellnau, et al.			
↓	6,588,409	07/08/2003	Maloney, et al.			
DT	6,560,526	05/06/2003	Matekunas, et al.			

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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Examiner *Brenham* Date Considered

8/11/04

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U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	1,1260,724	03/26/1918	W. B. Slaughter, Jr. & R. A. Gaertner			10/30/1916
	13,091,741	05/28/63	L. C. Eisaman et al.	331	183	04/18/1957
	13,752,138	08/14/1973	Gaines	123	139R	08/09/1971
	13,976,042	08/24/1976	Baguelin	123	139AR	10/08/1974
	14,006,722	02/08/1977	Hata et al.	123	124A	01/31/1975
	14,036,014	07/19/1977	Ariga	60	274	10/10/1975
	14,129,109	12/12/1978	Matsumoto	123	198F	08/11/1977
	14,134,261	01/16/1979	Iizuka et al.	60	276	08/15/1977
DT	14,143,635	03/13/1979	Iizuka et al.	123	198F	12/06/1977
DT	14,184,470	01/22/1980	Iizuka	123	198F	04/13/1978

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No
JP58-140432	20-08-1983	Japan	F02D17	02	No
IEP0846221B1	03-II-1999	PCT	F02D17	02	Yes
IEP0919702A2	02-06-1999	PCT	F01N3	20	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

DT | International Search Report for PCT/US02/37775, April 9, 2003, pages I & II

DT | International Search Report for PCT/US02/37813, April 4, 2003, pages I & II

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Name: Misty Segraves

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DT	14,207,856	07/17/1980	Sugasawa et al.	123	198F	07/06/1978
	14,303,053	12/01/1981	Etoh et al.	123	568	05/02/1980
	14,305,249	12/15/1981	Schmid et al.	60	274	11/02/1979
	14,344,393	08/17/1982	Etoh et al.	123	198F	06/20/1980
	14,391,095	07/05/1983	Virk	60	286	07/02/1981
	14,391,240	07/05/1983	Sugasawa et al.	123	198F	03/26/1980
	14,395,875	08/02/1983	Virk	60	274	07/24/1981
	14,404,796	09/20/1983	Wade	60	274	06/03/1982
	14,436,060	03/13/1984	Tanaka et al.	123	41.1	01/28/1981
	14,450,801	05/29/1984	Thedens et al.	123	198F	11/16/1981
DT	14,459,952	07/17/1984	Holstein	123	198F	07/28/1982
DT	14,484,548	11/27/1984	Sugasawa et al.	123	198F	11/12/1980

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No
DT IEP0919702A3	16-08-2001	Germany	F01N3	20	No
DT IWO9708441	05-08-1996	PCT	F02D17	02	Yes

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

DT | Clean Diesel III, Southwest Research Institute, January 2001, pages 1-80 inc. attachments

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Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	14,550,704	11/05/1985	Barho et al.	123	481	03/19/1984
	14,572,148	02/25/1986	Deutschmann et al.	123	559	07/11/1984
	14,640,241	02/03/1987	Matsunaga	123	198F	05/29/1985
	14,671,226	06/09/1987	van Rinsum	123	179F	01/04/1982
	14,860,716	08/29/1989	Deutschmann	123	560	05/03/1988
	14,930,455	06/05/1990	Creed et al.	123	41.1	10/14/1988
	14,936,273	06/26/1990	Myers	123	321	04/28/1989
	14,976,228	12/11/1990	Kawamura	123	90.11	10/13/1989
	15,042,444	08/27/1991	Hayes et al.	123	339	05/07/1990
	15,043,894	08/27/1991	Yamaguchi	1364	424.1	07/05/1989
	15,088,460	02/18/1992	Echeverria	123	322	09/01/1989
DT	15,099,816	03/31/1992	Ohga et al.	123	481	08/24/1990

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No
WO03/048533A1	02-06-2003	PCT	F01N3	100	Yes

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	5,101,801	04/07/1992	Schatz	123	556	03/28/1991
	5,117,790	06/02/1992	Clarke et al.	123	321	02/19/1991
	5,138,992	08/18/1992	Krieger	123	198F	01/15/1992
	5,190,013	03/02/1993	Dozier	123	481	01/10/1992
	5,195,485	03/23/1993	Jensen et al.	123	198F	04/21/1992
	5,249,130	09/28/1993	Mamiya et al.	364	431.05	09/20/1991
	5,407,130	04/18/1995	Uyeki et al.	237	12.3B	07/20/1993
	5,433,182	07/18/1995	Augustin et al.	123	456	10/13/1994
	5,483,941	01/16/1996	Cullen et al.	123	481	10/25/1993
	5,492,100	02/20/1996	Ishii et al.	123	481	09/15/1994
	5,549,093	08/27/1996	Imamura	123	481	12/28/1994
DT	5,555,871	09/17/1996	Gopp et al.	123	481	05/08/1995
	5,647,207	07/15/1997	Grotjahn et al.	60	300	06/19/1995

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No
DT WO03/048548A1	12-06-2003	PCT	F02D17	02	Yes

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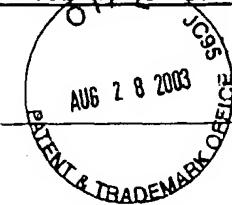
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Exam. Init.	Document Number	Date	Name	Class	Sub Class	Filing Date (if approp.)
DT	15,655,365	08/12/1997	Worth et al.	60	285	06/06/1995
	15,695,430	12/09/1997	Moyer	477	189	01/29/1996
	15,720,260	02/24/1998	Meyer et al.	123	436	12/13/1996
	15,769,054	06/23/1998	Schnabel et al.	123	437	02/26/1996
	15,802,846	09/08/1998	Bailey	60	278	03/31/1997
	15,813,383	09/29/1998	Cummings	123	198F	09/04/1996
	15,826,563	10/27/1998	Patel et al.	123	481	07/28/1997
	15,867,982	02/09/1999	Tengblad et al.	60	274	06/02/1995
	15,875,743	03/02/1999	Dickey	123	25C	07/28/1997
	15,930,992	08/03/1999	Esch et al.	60	274	10/18/1996
✓	15,894,726	04/20/1999	Monnier	60	274	10/27/1997
DT	15,934,263	08/10/1999	Russ et al.	123	698	07/09/1997

FOREIGN PATENT DOCUMENTS

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D	5,979,394	11/09/1999	Schmidt	123	198F	05/21/1998
	6,009,857	01/04/2000	Hasler et al.	123	481	05/29/1997
	6,023,929	02/15/2000	Ma	60	295	08/25/1998
	6,032,869	03/07/2000	Ito et al.	237	12.3B	04/02/1997
	6,032,929	03/07/2000	Vatne	254	385	06/22/1998
	6,164,065	12/26/2000	Denari et al.	60	284	11/12/1999
	US6,178,371B1	01/23/2001	Light et al.	701	93	04/12/1999
	US6,209,526B1	04/03/2001	Sun et al.	123	481	10/18/1999
	US6,220,233B1	04/24/2001	Pierpont	123	568.12	10/13/1999
	US6,237,330B1	05/29/2001	Takahashi et al.	60	285	04/13/1999
	US6,244,242B1	06/12/2001	Grizzle et al.	123	295	10/18/1999
D T	US6,244,258B1	06/12/2001	Akiyama et al.	123	568.21	12/01/1999

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner	<u>Reinhard</u>	Date Considered	<u>8/11/04</u>

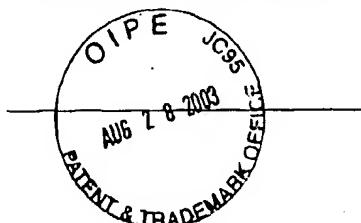
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DT	US6,305,344B1	10/23/2001	Perry	123	198F	10/03/2000
	US6,336,071B2	01/01/2002	Grizzle et al.	701	115	04/02/2001
	US6,354,266B1	03/12/2002	Cornell et al.	123	322	12/20/2000
	US6,360,713B1	03/26/2002	Kolmanovsky et al.	123	295	12/05/2000
	US6,367,443B1	04/09/2002	Bassi et al.	123	198F	03/22/2000
	US6,382,193B1	05/07/2002	Boyer et al.	123	560	11/20/2000
	US6,408,618B2	06/25/2002	Ide	60	285	02/01/2001
	US6,467,257B1	10/22/2002	Khair et al.	60	278	06/19/2001
	US6,543,398B1	04/08/2003	Roberts, Jr. et al.	123	58.8	07/19/2001
	US6,557,520B2	05/06/2003	Roberts, Jr.	123	276	08/30/2001
DT	US2001/0002379A1	05/31/2001	Schechter	477	115	01/12/2001
DT	US2001/0002538A1	06/07/2001	Katsuta et al.	60	284	12/06/2000

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DT	JUS2001/0050070A1	12/13/2001	Xu et al.	123	295	06/11/2001
	JUS2002/0020169A1	02/21/2002	Ketcher	60	285	08/21/2001
	JUS2002/0059915A1	05/23/2002	Houston et al.	123	305	10/05/2001
	JUS2003/0041836A1	03/06/2003	Roberts, JR.	123	276	08/30/2001
	JUS2003/0066507A1	04/10/2003	Roberts, JR.	123	256	10/10/2001
	JUS2003/0074893A1	04/24/2003	Webb et al.	60	285	10/11/2002
	JUS2003/0101961A1	06/05/2003	Foster	123	198F	11/25/2002
DT	JUS2003/0121249A1	07/03/2003	Foster et al.	60	285	11/25/2002

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